

ISPAS, M.

"Phenomena analysis of the process in the blast furnace" by A.P.
Lyuban [Lyuban, A.P.]. Reviewed by M. Ispas. Metalurgia constr
mas 15 no.1:91 Ja '63.

ISPAS, M.

"Furnace coke economy" by M. Ia. Ostrouhov. [Ostroukhov, M.Ya].
Reviewed by M. Ispas. Metalurgia Rum 15 no.4:333 Ap '63.

ISPAS, M

"Agglomeration process" by E.F. Vegman. Reviewed by M. Ispas.
Metalurgia Rum 15 no.5:378 My '63.

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618910012-3

ISPAS, M.

"Electric furnace steelmaking." Reviewed by M. Ispas.
Studii cerc metalurgie 9 no.2:405-406 '64.

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618910012-3"

L 15907-66 EWP(t)/EWP(b) JD

ACC NR: AP6008364

SOURCE CODE: RU/1017/65/000/001/0033/0035

AUTHOR: Ispas, M. (Engineer)

ORG: Metallurgical Research Center (Centrul de cercetari metallurgice)

TITLE: Laboratory equipment and calculation methods used in the reduction of ores, agglomerates, and pellets

SOURCE: Metalurgia, no. 1, 1965, 33-35

TOPIC TAGS: chemical reduction, inorganic oxide, metal compound, laboratory equipment, metal extracting

ABSTRACT: A survey of the various types of equipment and methods of calculation used to determine the degree of reduction of metallic oxides, ores and agglomerates under laboratory conditions. The author calls attention to the negative effect of this lack of a standard method and illustrates the variation of results by practical examples. Orig. art. has: 7 figures and 2 formulas. /JPLS/

SUB CODE: 11 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 006
SOV REF: 003

O.C.
Card 1/1

UDC: 669.094.2.001.4

35904
3/123/62/000/004/003/014
A004/A101

16.1120

AUTHOR: Ispas, St.

TITLE: Manufacturing combustion chambers for turbo-jet engines

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 4, 1962, 11 - 12,
abstract 4B68 ("Rev. transp." (RPR), 1961, v. 8, no. 4, 171 - 182,
Rumanian, Russian, German, French and English summaries)

TEXT: The author enumerates the conditions at which combustion chambers
and fire tubes of aircraft turbo-jet engines have to operate: extremely high
thermal loads; fuel combustion without pulsation; dependable operation during
flights at high altitudes, at reduced pressure and very low air temperature;
high strength and service life. The author points out factors influencing the
gas temperature at the combustion chamber outlet, and analyzes the combustion
process in two combustion chamber zones. An account is given of the demands
made to the combustion chamber material: strength at 1,150 - 1,250°C, corrosion
resistance and ductility during forming. An alloy of the following composition
is recommended (in %): Ni - 75, Cr - 19-22, Fe - 1, Ti - 0.15-0.35, C - 0.12,
Al - 0.15, S - 0.1, Pb - 0.015, Mn - 0.7. The chamber and fire-tube parts are

Card (1/2) X

Manufacturing combustion chambers for...

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punched from sheets of this alloy, measuring 1,200 x 800 mm and 1 - 2 mm gauge. The author recommends to use thermo-chemical chrome plating of the punched parts of this alloy in hermetically sealed cases filled with a powder (composition: ferro-chrome - 50%, aluminum oxide - 43%, ammonium chloride - 7%) with 6 hours holding in the furnace at 1,050°C, after which the parts are polished. The author describes and analyzes in detail the punching processes for each of the fire tube parts, taking into account their shapes, dimensions, etc. He presents indications as to the choice of the technological process and recommendations concerning the rounding off radii, number of transitions, magnitude of transitional diameters, etc. The author describes the method of calculating the stresses arising during the die-forging of the parts. He presents sketches of the dies using rubber during the profile punching of round parts. For welding the chamber parts, he recommends spot or seam welding and a corresponding standardization of equipment. Instructions on the checking of the manufactured parts and units are given. There are 24 figures and 2 tables.

P. Sokolov

[Abstracter's note: Complete translation]

Card 2/2

L 33048-66

ACC NR: AP6024232

SOURCE CODE: RU/0005/65/000/003/0087/0088

37

B

AUTHOR: Boerescu, Cezar--Boyerescu, Ch (Engineer); Ispas, Stefan--Ispas, Sh. (Engineer)

ORG: none

TITLE: Note on the radiation pattern computation for standard panel aerials

SOURCE: Telecommunicatii, no. 3, 1965, 87-88

TOPIC TAGS: antenna radiation pattern, antenna engineering

ABSTRACT: The authors summarize the main features of radiation pattern diagrams for standard panel antennas and describe the common method of constructing such diagrams. Some numerical examples are given. Orig. art. has: 6 figures. [JPRS]

SUB CODE: 09 / SUBM DATE: none

UDC: 621.396.677

Card 1/1 20

GRUASNICZEKI, F., fiz.; ISPASOIU, G., fiz.

Error evaluation in the process of graduating the standardized
temperature measuring devices in Rumania. Metrologia apl 8
no.1:21-27 Ja-Mr '61.

GRUZSNICZKI, F., fiz.; ISPASOIU, Gh., fiz.

Analysis of some measuring apparatus for temperatures, analytical quantities and laboratory measurement glass containers, produced in Rumania. Metrologia apl 9 no.3:129-135 My-Je '62.

ISPASOIU, Gh.; RANCU, N.

Product quality evaluation by the progressive extraction method.
Metrologia apl 10 no.3:101-110 Mr '63.

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618910012-3

ISPASOIU, G.; ASAVINEI, I.

Reproduction and transfer of temperature unit by optic monochromatic
pyrometer with loss of filament. Metrologia spl 10 no.4:150-159
Ap '63.

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618910012-3"

ISPASOIU, Gh.; RANCU, N.; PIRSAN, M.; ROTHE-SCHMALTZER, I.

Estimation of the average life of incandescent bulbs by the probability network method combined with the method of the least squares. Metrologia apl 11 no. 5:195-201 My '64.

ISPASOIU, G., fiz.; PATRASCU, St., fiz.; ASAVINEI, I.

Reproduction and transmission of the temperature unit by
the PtRh-Pt thermocouple. Metrologia apl 11 no.12:535-
540 D '64.

ISPENKOV, A. (Veterinary Doctor, Kalodishchansk Veterinary Section, Minsk Oblast'). (Abstracted by NOSKOV, A. I.)

"Effective liniment against herpes tonsurans".....
Veterinariya, vol. 39, no. 3, March 1962 pp. 28

ISPIR, Adrian, prof. (Bucuresti)

Some floral and faunal aspects in Crimea and Caucasus. Natura
Biologie 15 no.6:83-87 N-D '63.

ROBOVICI, N., dr.; PARASCHIVESCU, C., dr.; ISPIRESCU, M., dr.

The role of the artificial arch in the stability of total dentures. Stomatologia (Bucur) 12 no.2:103-113. Mr-Ap'65.

1. Lucrare efectuata la Clinica de stomatologie, ortopedica, Institutul medico-farmaceutic, Bucuresti (seful clinicii: prof. E. Costa).

L 24683-65 EIT(m)/EPP(c)/ENP(j)/T
ACCESSION NR: AR6000965

Pc-4/Pt-4 RM
8/0282/64/000/010/0001/0001

36
2

SOURCE: Ref. zh. Khimicheskaya i khodotil'noye mashinostroyeniye. Otd. vyp.
Abs. 10.47.12

AUTHOR: Ispir'yam, E. M.; Poddal'myy, S. I.; Polyskov, A. V.

TITLE: Compiling a mathematical description of the emulsion polymerization process and using it in an automated control system

CITED SOURCE: Tr. Labor. khimii vysokomolekul. sovremennosti. Voronezhsk. un-t.,
vyp. 2, 1963, 196-203

TOPIC TAGS: emulsion polymerization, butadiene polymerization, styrene polymerization, polymerization control, automatic control system

TRANSLATION: Statistical data compiled at an active plant were processed mathematically in an effort to optimize the industrial process of emulsion polymerization of butadiene with styrene. An analysis of the selected input parameters of the process, giving due consideration to its technological characteristics in the form of a coefficient of mutual correlation, indicates that some

Card 1/2

L 24683-65
ACCESSION NR: AR5000965

parameters can be regulated and others should be rigidly stabilized. These parameters govern the final constants and the latter determine, in turn, the optimal pattern of the process, i.e. conversion and plasticity of the rubber. The authors evolved linear equations correlating initial and final constants. These can be solved during the process by a computer, thus facilitating automated regulation of a polymerization process. The proposed system makes it

The authors received a linear equation concerning interfacial tension and diffusion coefficient. These can be solved during the process by a computer thus facilitating automated regulation of a polymerization process. The proposed system makes it possible to optimize the process of emulsion polymerization, while necessary adjustments and refinements can be effected while the process takes place.

Bibli. with 2 titles. G. Cheruyy

SUB CODE: IE, GC

ENCL: 00

Cord 2/2

ISPIRYAN, G.P., kandidat tekhnicheskikh nauk; KAGAROVSKAYA, R.M., inzhener.

Cutting footwear materials on presses with a movable carriage. Leg.
prom. 16 no.2:32-34 F '56. (MLRA 9:7)
(Shoe machinery)

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618910012-3

ISFIRYAN, G.P., kandidat tekhnicheskikh nauk; YELIN, B.L., inzhener;
KUPRIANOVA, G.N., inzhener.

Economical use of hides, and sole and Russian leathers. Leg.prom.
17 no.6:7-9 Je '57. (MLRA 10:8)
(Leather industry) (Hides and skins)

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618910012-3"

ISPIRYAN, G.P., kand.tekhn.nauk; SHIROKOV, B.G., inzh.

Economics of cutting out chrome-tanned pigskin butts.

Leg.prom. 17 no.8:7-9 Ag '57.

(Hides and skins)

(MIRA 10:10)

ISPIRYAN, G.P., kand. tekhn.nauk; VOL'VICH, R.M., inzh.

Efficient pattern layout in cutting fabrics of "nonoptimum" width.
Leg. prom. 18 no.1:6-10 Ja '58. (MIRA 11:2)
(Shoe industry)

ISPIRYAN, G.P., kand.tekhn.nauk; KUPRIYANOVA, G.N., inzh.; AYZENKREMER,
A.A., inzh.

Efficient organization of the working space for cutters of
Russian leather. Izv. vys.ucheb. zav.; tekhn.leg. prom. no.2:
100-105 '58. (MIRA 11:6)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti (for
Isipryan). 2. Ukrainskiy nauchno-issledovatel'skiy institut kozhevennoy
promyshlennosti (for Kupriyanova, Ayzenkremer).
(Shoe manufacture)

ISPIRYAN, G.P., kand.tekhn.nauk; YELEN, B.L., inzh.; DUSHIN, B.M., inzh.

Using middle-weight pig skins for manufacturing hard leather. Izv.
vys.ucheb.zav.; tekhn.leg.prom. no.6:26-32 '58. (MIRA 12:4)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti (for
Ispiryan). 2. Ukrainskiy nauchno-issledovatel'skiy institut kozhe-
venno-obuvnoy promyshlennosti (for Yelen, Dushin).

(Leather research)

ISPIRYAN, G.P., kand. tekhn. nauk; KUKULYAN, S.P., inzh.; MALKIMAN, Ye.I.,
~~inzh.~~; SHIROKOV, B.G., inzh.

Tanning hides in butts divided into two portions. Leg. prom. 18 no.3:
11-12 Mr '58. (MIRA 11:4)

(Tanning)

LUKOV, V.I.; ISPIRYAN, G.P., kand. tekhn. nauk; GOL'DSHTBYN, I.G.,
starshiy inzh.

System of "closed" shifts. Leg.prom. 18 no.10:9-11 0 '58.
(MIRA 11:11)

1. Glavnnyy inzhener Kiyevskoy obuvnoy fabriki №.4 (for Lukov).
(Shift systems)

ISPIRYAN, G.P., dotsent, kand.tekhn.nauk

Specialization in the footwear industry as a source for an
increase in labor productivity. Izv.vys.ucheb.sav.; tekhn.
leg.prom. no.3:3-11 '59. (MIRA 12:12)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti.
Rekomendovana kafedroy ekonomiki i organizatsii proizvodstva.
(Shoe industry--Labor productivity)

ISPIRYAN, G.B., kand. tekhn. nauk dots.

Economic basis for the selection of an optimum program of
continuous mass-production lines. Izv. vys. ucheb. zav.; tekhn.
leg. prom. no. 4:18-28 '59. (MIRA 13:2)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti.
Rekomendovana kafedroy ekonomiki i organizatsii proizvodstva.
(Assembly-line methods) (Shoe industry) (Leather industry)

ISPIRYAN, G.P., kand.tekhn.nauk, dotsent

Further improvement of the organization of conveyor production-lines in the shoe industry. Izv.vys.ucheb.zav.; tekhn.leg.prom. no.3:14-27 '60. (MIRA 13:8)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti. Rekomendovana kafedroy ekonomiki promyshlennosti i organizatsii proizvodstva.

(Assembly-line methods) (Shoe industry)

ISPIRYAN, G.P.; PECHEN', V.M.

Ukrainian conference of the Scientific and Technical Society of
Light Industry held in Dnepropetrovsk. Izv.vys.ucheb.zav.; tekhn.
leg.prom. no.3:157-160 '60. (MIRA 13:8)
(Ukraine--Assembly-line methods)

ISPIRYAN, G.P., kand.tekhn.nauk, dotsent

Labor productivity index in work and standard physical terms.
Izv.vys.ucheb.zav.; tekhn.leg.prom. no.6:7-12 '61. (MIRA 14:12)

1. Kiyevskiy tekhnologicheskiy institut legkoj promyshlennosti.
Rekomendovana kafedroy ekonomiki promyshlennosti i organizatsii
proizvodstva.

(Labor productivity)
(Time study)

ISPIRYAN, G.P., dotsent, kand.tekhn.nauk; CHMELEV, V.S., student; YUPIK, V.P., student; ALAD'YEVA, Ye.I., student; GUSEVA, V.V., student

Economic justification of the optimum program for continuous shoe production lines. Izv.vys.ucheb.zav.; tekhn.leg.prom. no.2:3-12 '61.
(MIRA 14:5)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti.
Rekomendovana kafedroy ekonomiki promyshlennosti i organizatsii proizvodstva.

(Shoe manufacture) (Assembly-line methods)

ISPIRYAN, G.P., dotsent

Method of estimating the achieved mechanization of labor.
Kozh.-obuv.prom. 3 no.3:1-5 Mr '61. (MIRA 14:6)
(Machinery in industry)

ISPIRYAN, G.P., kand.tekhn.nauk, dotsent; SHCHUKINA, N.G., kand.tekhn.nauk

Calculation method for setting work norms in the manufacture of
leather. Izv.vys.ucheb.zav.; tekhn.leg.prom. no.3:3-13 '61.

(MIRA 14:7)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti,
Rekomendovana kafedroy ekonomiki promyshlennosti i organizatsii
proizvodstva.

(Leather industry--Production standards)

ISPIRYAN, G.P.; MERZON, A.G.; AFANAS'YEVA, A.A., dots., retsenzent;
PLEMYANNIKOV, M.N., red.; KNAKNIN, M.T., tekhn. red.

[Analysis of the production operations of leather factories]
Analiz proizvodstvennoi deiatel'nosti kozhevennykh zavodov.
Moskva, Rostekhizdat, 1962. 90 p. (MIRA 16:2)
(Leather industry--Accounting)

ISPIRYAN, G.P., kand.tekhn.nauk, dotsent

Using mathematical (linear) programming for determining the need for stiff leather. Report No.1: General mathematical formulation of the problem conditions. Izv.vys.ucheb.zav.; tekh.leg.prom. no.2:11-20 '62. (MIRA 15:5)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti. Rekomendovana kafedroy ekonomiki promyshlennosti i organizatsii proizvodstva.

(Leather)
(Shoe manufacture)

ISPIRYAN, G.P., kand.tekhn.nauk, dotsent; SHCHUKINA, N.G., kand.tekhn.nauk

Stability coefficient of time series. Izv.vys.ucheb.zav.;tekhn.
leg.prom. no.2:39-47 '62. (MIRA 15:5)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti.
Rekomendovana kafedroy ekonomiki promyshlennosti i organizatsii
proizvodstva.

(Time study) (Leather industry)

ISPIRYAN, G.P., kand.tekhn.nauk, dotsent

"Organization of the basic production processes in the enterprises of light industry" by I.B. Bass. Reviewed by G.P. Ispirian. Izv.vys.ucheb.zav.;tekhn.leg.prom. no.2:150-154 '62.

(MIRA 15:5)

(Industrial management)
(Bass, I.B.)

ISPIRYAN, G.P., kand.tekhn.nauk, dotsent

Application of the mathematical programming (linear) in determining the needs for stiff leather. Report No.2: Characteristics of the mathematical formulation of the problem. Iss.vys.ucheb.zav.; tekh.leg.prom. 3:12-20 '62. (MIRA 15:6)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti. Rekomendovana kafedroy ekonomiki promyshlennosti i organizatsii proizvodstva.

(Shoe industry—Management)
(Programming (Mathematics))

ISPIRYAN, G.P., kand.tekhn.nauk, dotsent; SHCHUKINA, N.G., kand.tekhn.nauk

Number of measurements for the time study in leather manufacture.
Izv.vys.ucheb.zav.; tekhn.leg.prom. 3:21-27 '62. (MIRA 15:6)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti.
Rekomendovana kafedroy ekonomiki promyshlennosti i organizatsii
proizvodstva.

(Leather industry)
(Time study)

ISPIRYAN, G. P., kand. tekhn. nauk, dotsent; CHMELEV, V. S., inzh.
GRUBYI, N. A., inzh.

Calculation method of setting work norms in the cutting of
soft leather. Report No. 1: Classification of time expenditure
and formulas for calculating time norms for cutting a complete
set of parts. Izv. vys. ucheb. zav.; tekhn. leg. prom. no.4:
21-24 '62. (MIRA 15:10)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti.
Rekomendovana kafedroy ekonomiki promyshlennosti i organizatsii
proizvodstva.

(Shoe manufacture—Production standards)

ISPIRYAN, G.P., kand. tekhn. nauk, dotsent

Optimum methods for the cutting of materials. Izv. vys. ucheb. zav.; tekhn. leg. prom. no.3:3-11 '63. (MIRA 16:7)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti.
Rekomendovana kafedrey ekonomiki promyshlennosti i organizatsii
proizvodstva.

(Linear programming)
(Industrial management)

ISPIRYAN, G.P., kand. tekhn. nauk, dotsent

Optimum cutting of materials. Izv. vys. ucheb. zav.; tekhn. leg.
prom. no.4:3-12 '63. (MIRA 16:10)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti.
Rekomendovana kafedroy ekonomiki promyshlennosti i organizatii
proizvodstva.

ISPIRYAN, G.P., kand. tekhn. nauk, dotsent; CHMELEV, V.S., inzh.;
GRUBYY, N.A., inzh.

Mathematical method for establishing work norms in the cutting
of soft leather. Izv. vys. ucheb. zav.; tekhn. leg. prom. no.5:
10-17 '63. (MIRA 16:12)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti.
Rekomendovana kafedroy ekonomiki promyshlennosti i organisatsii
proizvodstva.

31798

S/056/61/041/006/050/054
B109/B102

24.6800

AUTHORS: Alikhanyan, A. I., Arutyunyan, F. R., Ispiryan, K. A.,
Ter-Mikayelyan, M. L.

TITLE: A way of detecting high-energy charged particles

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 41,
no. 6(12), 1961, 2002-2010TEXT: The case is considered where a fast charged particle passes through a layer consisting of two different substances of thicknesses l_1 and l_2 and of electron densities N_1 and N_2 , where $N_1 > N_2$. Then, the exciting particle can be detected by way of the resulting photon emission.

$$dm = \frac{4p^2(1+\alpha)}{137\pi l_1} \sum_{r=1}^{r_{\max}} \frac{d\omega}{r^2\omega^3} \frac{\left[1 - \frac{1}{4}(E_{in}/E)^2 \omega/r - \omega^{-1}\right]}{(1-p/\omega r)^2 (1+p\alpha/\omega r)^2} \times \\ \times \sin^2 \left[\left(\frac{a}{1+\alpha} \right) \pi r - \frac{\pi}{\omega} \left(\frac{ap}{1+\alpha} \right) \right]. \quad (1.3)$$

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A way of detecting high-energy...

is obtained according to M. L. Ter-Mikayelyan (DAN SSSR, 134, 318, 1960; Izv. AN ArmSSR, 14, 103, 1961) for the number of photons emitted in the frequency interval $d\omega$ per cm of layer thickness. The frequency is measured in terms of $\omega_{\min} = l_1 r_e c(N_1 + \alpha N_2)$. r_e is the classical electron radius, c - light velocity, $\alpha = l_2/l_1$, $p = (N_1 - N_2)/(N_1 + \alpha N_2)$,

$$E_{10} = mc^3 h [\pi^{-1} r_e (1 + \alpha) (N_1 + \alpha N_2)]^{1/4}. \quad (1.6), \quad r_{\max} \approx l_1 [\pi^{-1} r_e (1 + \alpha) (N_1 + \alpha N_2)]^{1/4} \cdot 1.7.$$

The photon spectrum is between ω_{\min} and ω_{\max} , where

$$\omega_{\max}^{\text{fr}} = (r_1 \mp \sqrt{r_1^2 - (E_{1p}/E)^2})/(E_{1p}^2/2E^2). \quad (1.8)$$

and is shown in Fig. 1 for the case of $E = 2.2 E_{1W}$, $\alpha = 1$. Fig. 2 shows the total number of quanta (m_1) as dependent on the particle energy for $\alpha = 1$ and for different ω . For ω values between 1.2 and 1.6 are shown to be the most convenient as regards the attainable number of quanta. The energy

Card 2/ 2

37789

S/120/62/000/002/013/047
EO39/E520

21,6000

AUTHORS: Ispiryan, K.A. and Oganesyan, A.G.

TITLE: Ferrite coincidence and anticoincidence circuits

PERIODICAL: Pribory i tekhnika eksperimenta, no.2, 1962, 61-62

TEXT: A four-channel coincidence and anticoincidence circuit is described which makes use of ferrite cores with large and small hysteresis loops as current integrators. Four pairs of input and output coils are wound on a ferrite ring core. In the case of a ferrite with a large hysteresis loop it is possible to obtain a large output signal corresponding to a signal in (a) one or more input coils, (b) two or more input coils, and so on. By changing the current direction in any input coil it is possible to use the channel for anticoincidence. In the case of the ferrite with a small hysteresis loop it operates almost as a linear element and the signal from the outlet coil is proportional to the number of input signals. Details of the circuit are given and its method of operation described. A BT-5 (VT-5) ferrite is used with coercive force $H_K = 0.15$ oersted, saturation field $H_M = 0.4$ oersted.

Card 1/2

30965
S/043/62/026/006/011/020
B125/B102

9,6150

AUTHORS: Alikhanyan, A. I., Arutyunyan, F. R., Ispiryan, K. A.,
and Ter-Mikayelyan, M. L.

TITLE: The possibility of detecting charged particles of high
energies.

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya,
v. 26, no. 6, 1962, 746-753

TEXT: The question is discussed whether resonance radiation resulting
from fast particle passage through periodically (period 1) alternating
plates of thickness l_1 and l_2 ($l=l_1+l_2$, $\alpha=l_2/l_1$) can be used to detect
fast particles and to measure their energy. The main contribution to the
processes under consideration is that of the harmonics lying below a
certain threshold. If the particle energy is much higher than threshold
energy, the emitted frequencies ω of all harmonics lie somewhere between
a maximum and a minimum, i.e. between $1/r$ and $4rE^2/E_n^2$; r is the order

Card 1/3

38965
S/048/62/026/006/011/020
B125/B102

9.6150

AUTHORS:

Alikhanyan, A. I., Arutyunyan, F. R., Ispiryan, K. A.,
and Ter-Mikayelyan, M. L.

TITLE:

The possibility of detecting charged particles of high
energies

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya,
v. 26, no. 6, 1962, 746-753

TEXT: The question is discussed whether resonance radiation resulting from fast particle passage through periodically (period l) alternating plates of thickness l_1 and $l_2 (l = l_1 + l_2, \omega = l_2/l_1)$ can be used to detect fast particles and to measure their energy. The main contribution to the processes under consideration is that of the harmonics lying below a certain threshold. If the particle energy is much higher than threshold energy, the emitted frequencies ω of all harmonics lie somewhere between a maximum and a minimum, i.e. between $1/r$ and $4rE^2/E_n^2$; r is the order

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S/048/62/026/006/011/020
B125/B102

The possibility of detecting ...

of the harmonics. At energies which are not too high, but already relativistic, the particle radiates only on harmonics of large r . Radiations with new harmonics arise when the particle energy increases gradually. The energy loss due to resonance radiation depends only slightly on the thickness of the plates and decreases slowly with increasing α . The rapid decrease of the number of quanta beyond the maximum (for any harmonic) at $\omega \approx 1.5 \omega_{\min}$ makes it permissible to neglect the contribution of high frequencies to radiation intensity. The particle energy in the range $E/mc^2 = 2 \cdot 10^2 - 2 \cdot 10^3$ can be measured by the method of energy release. The method of characteristic radiation, applicable in the range $E/mc^2 = 5 \cdot 10^2 - 5 \cdot 10^3$, depends on the radiation in the layered medium being passed through an absorbing gas which thereupon emits radiation which is characteristic. Using the method of Compton scattering, which is suitable for a wide energy interval, the particle produced in the layer medium undergoes simple Compton scattering. The γ -quanta striking the lateral faces of the layer medium are recorded by liquid scintillators. The occurrence of resonance radiation is

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B125/B102

The possibility of detecting ...

accompañado by background radiation. Cosmic muons of $\sim 10^{11}$ ev can be detected with a coincidence circuit. Muons of $\sim 5 \cdot 10^{11}$ ev and above can be detected by the method of characteristic radiation. Adequate experiments are in preparation. There are 4 figures and 2 tables.

ASSOCIATION: Fizicheskiy institut AN ArmSSR (Physics Institute AS ArSSR)

Card 3/3

ALIKHANYAN, A.I., red.; NIKITIN, S.Ya., prof., ovtv. red.;
~~ISPIRYAN, K.A.~~, red.; AMATUNI, A.TS., red.; KAPLANYAN,
M.A., tekhn. red.

[Physics of elementary particles] Voprosy fiziki elementarnykh chastits. Pod obshchey red. A.I. Alikhaniana. Erevan, Izd-vo AN Arm.SSR, 1963. 594 p. (MIRA 16:12)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po ispol'zovaniyu atomnoy energii. 2. Chlen-korrespondent AN SSSR (for Alikhanyan). (Particles (Nuclear physics))

ARUTYUNYAN, V.M.; ARUTYUNYAN, F.E.; ISPIRYAN, K.A.; TUMANIAN, V.A.

Light scattering on light. Zhur. eksp. i teor. fiz. 45 no.4:
1270-1272 O '63. (MIRA 16:11)

1. Institut fiziki Gosudarstvennogo komiteta po ispol'seveniyu
atomnoy energii SSSR, Yerevan.

ARUTYUNYAN, F.R.; ISPIRYAN, K.A.; OGANESEYAN, A.G.

Radiation of superhigh-energy μ -mesons in a layered medium.
Izv. AN SSSR. Ser. fiz. 28 no.11:1864-1865 N '64.

(MTRA 17:12)

1. Fizicheskiy institut Gosudarstvennogo komitet'a po ispol'zovaniyu
atomnoy energii SSSR.

REF ID: A66445
ACCESSION NR.: A15007929

8/0000/65/000/000/003/000

AUTHOR: Arutyunyan, V. M.; Arutyunyan, P. R.; Ispiryany, K. A.; Tumanyan, V. A.

TITLE: Scattering of light on light

SOURCE: International Conference on High Energy Accelerators, Dubna, 1963, Trudy.
Moscow, Atomizdat, 1964, 403-404

TOPIC TAGS: high energy accelerator, light scattering, laser, photon scattering

ABSTRACT: Observation and investigation of the rare and very important process of light-light scattering are possible at present-day intensities of laser emission and bremsstrahlung γ -quanta which are generated by high-energy electrons. According to classical electrodynamics, waves are propagated independently of one another; a

light-light scattering are possible at present-day intensities of light scattering and bremsstrahlung γ -quanta which are generated by high-energy electrons. According to classical electrodynamics, waves are propagated independently of one another, a direct consequence of the linearity of the Maxwell equations. The quantum effects of interaction of electromagnetic waves with the vacuum or the electron-positron field lead to the nonlinear effect of photon-photon scattering. The theoretical problem of light scattering on light has been solved (H. Euler, 1936; A. Akhiezer, 1937; R. Karplus and M. Neuman, 1950). Attempts were made to experimentally observe the given effect (S. I. Vavilov, 1928-30). For frequencies ω very much less than the electron mass m , quantum electrodynamics gives for the cross-section in the

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L 46148-65

ACCESSION NR: A15007929

system of the center of inertia the following value

$$d\sigma = \frac{[1 - 137 \cdot (1 - \frac{\omega}{\omega_0})^4]}{(2\pi)^2 \cdot 90 \cdot m^2} \left(\frac{\omega}{m} \right)^4 (3 + \cos \theta_0)^2$$

where $\alpha = 1/137$ and θ_0 is the angle of scattering. The units are so chosen that $\hbar = c = 1$. Thus in the optical region of frequencies the cross-section is insignificant (around 10^{-64} cm²), and therefore, regardless of the existence of powerful sources of light photons, the experimental observation of light scattering on light in this region of frequencies is difficult. Since the cross-section rises sharply in magnitude with increasing frequency, the experimental observation of this interesting process must be at high frequencies. In particular, for frequencies of approximately 10^5 ev, the cross-section reaches values around $\approx 10^{-35}$ cm². Such frequencies can be realized in the case of the scattering of γ -quanta of several Gev's on light photons, whose preferable sources are modern lasers. If the energies of the colliding photons in the laboratory system are ω_1 and ω_2 , where the first is much greater than the second, then the cross-section of photon-photon scattering which

light photons, whose preferable sources are nuclear reactors. In this connection the colliding photons in the laboratory system are ω_1 and ω_2 , where the first is much greater than the second, then the cross-section of photon-photon scattering which is integrated with respect to the energies of the scattered photons up to a certain value of the frequency ω_3 will be

$$\Omega = \frac{16 \cdot 10^9}{n} \cdot \frac{1}{\omega_1^2} \cdot \frac{\omega_1 - \omega_3}{\omega_1 + \omega_3}$$

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For $\omega_1 = 6 \cdot 10^9$ ev and $\omega_2 = 1.78$ ev (the photon energy of a ruby laser) the cross-section will be

$$\sigma = 2.56 \cdot 10^{-16} \frac{\omega_1}{\omega_2} \text{ cm}^2$$

The frequency of the scattered photon is expressed in terms of the scattering angle in the laboratory system in the following form

$$\omega_3 = \frac{2\omega_1\omega_2}{(\omega_1 + \omega_2) - (\omega_1 - \omega_2)\cos\theta}$$

It follows from formulas (3) and (4) that the main contribution to the cross-section is given by the scattered photons with high energies; hence, these photons are scattered mainly in the limits of very small angles in the direction of the photon of energy ω_1 . For example, in the case of scattered photons registering energies up to $\omega_3 = 500$ Mev, the cross-section is equal to $\sigma = 2.1 \cdot 10^{-16} \text{ cm}^2$. The angle within which the scattered photons are emitted increases with decreasing energy, and for $\omega_3 = 500$ Mev it amounts to $1.2 \cdot 10^{-4}$. The present report evaluates the number of registered events that may be obtained using beams of γ -quanta from present-day high-energy electron accelerators and the most intense beams of laser photons. If one utilizes γ -quanta with energy $\omega_1 = 5-6$ Gev formed by 6-kev electrons (the number of electrons per impulse of duration 10^{-6} sec amounts to about 10^{11} ; the cross-section of the electron beam equals 0.03 cm^2), and photons generated by a 500-ouida

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ruby laser with duration of burst of 10^{-6} sec (the number of photons equals $2 \cdot 10^{21}$), then if the laser is operated with a frequency of 1 cps the frequency of registration of γ -quanta with energy up to $\omega_3 = 500$ Mev will be equal to approximately two to three events each 2^4 hours. Here the cross-section of the beam of colliding photons is taken to be equal to 1 mm^2 (this is necessary in order to separate the scattered photons from the photons of the same energy of the primary beam). For a 40-Gev electron accelerator (Stanford), the number of electrons per impulse (planned) equals $6 \cdot 10^{12}$. The scattering of 33-40 Gev γ -quanta generated by these electrons against a laser photon beam leads to the registration of $10-15$ separate photons with energies up to 500 Mev each hour. As computations show, the frequency of observed events in such examples surpasses the possible background noise. There is also a possibility of increasing the number of registered events by increasing the laser emission, the frequency of their operation, the upper limit of the energy of the registered scatter γ -quanta, etc. Orig. art. has 4 formulas.

"APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618910012-3

... is also a possibility of increasing the number of registered counts by increasing the laser emission, the frequency of their operation, the upper limit of the energy of the registered scatter γ -quanta, etc. Ovrig. art. has 4 formulas.

ASSOCIATION: Fizicheskiy institut GKAE SSSR (Physics Institute, GKE SSSR)

SUBMITTED: 26 May 64

ENCL: 00

SUB CODES: OF, NP

NO REF Sov: 001

OTHER: 004

Card 4/4 C

APPROVED FOR RELEASE: 08/10/2001

CIA-RDP86-00513R000618910012-3"

L 4459-66 EWT(m)/FOC/I IJP(c)
ACC NR: AP5024657

SOURCE CODE: UR/0048/65/029/009/1769/1771

AUTHOR: Arutyunyan, V.B.; Isapiryan, K.A.; Oganesyan, A.G.

ORG: Physics Institute, State Committee on the Uses of Atomic Energy, SSSR (VNIIEF-cheskiy institut Gosudarstvennogo komiteta po ispol'zovaniyu atomnoy energii SSSR)

TITLE: Horizontal flux of muons with energies exceeding 100 Bev /Report, All-Union Conference on Cosmic Ray Physics held at Apatity 24-31 August 1961/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 9, 1965, 1769-1771

TOPIC TAGS: secondary cosmic ray, muon, charged particle, electromagnetic radiation, inhomogeneous medium

ABSTRACT: The horizontal flux of high energy cosmic ray muons was employed to investigate the radiation, discussed by M.L.Ter-Mikayelyan and others (Zh. eksperim. i teor. fiz., 39, 1693 (1960); 41, 2002 (1961); Nucl. Phys., 24, 43 (1961)), produced by the uniform motion of a charged particle through a periodic laminated medium. The 300 cm long laminated medium consisted of 300 equally spaced 0.2 mm thick sheets of paper. Cosmic ray muons entering from a solid angle of 0.29 sterad at zenith angles between 73 and 90° were selected with a counter telescope. Electrons were discouraged by a total of 117 radiation units of matter disposed in two absorbers, and spurious counts due to cosmic ray showers were eliminated by several surrounding counters in anticoincidence. Photons emitted in the backward direction by muons traversing the laminated

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L 4459-06

ACC NR: AP5024657

medium passed through a $10 \times 10 \times 40 \text{ cm}^3$ chamber containing Xe (pressure not given) where they excited the 35 keV characteristic Xe x-radiation. The Xe x-radiation was recorded with eight 8 cm diameter 5 cm thick NaI:TI crystals which could detect photons with energies between 20 and 100 keV. An event was recorded when at least two such x-rays were detected simultaneously with the passage of a muon. In 5465 hours 77 events were recorded, of which 9 are ascribed to background. The background was determined by recording events with a 11.5 g/cm^2 plastic shield between the laminated medium and the Xe chamber and is ascribed to direct excitation of Xe x-rays by passage of charged particles through the Xe chamber. This counting rate is compared with muon fluxes measured by others, and it is concluded that muons with energies above 700 BeV were recorded and that the hypothesis that muons radiate when traversing a laminated medium has been confirmed. The authors find it difficult to draw any definite conclusions from their data concerning the relative numbers of K- and x-mesons produced in primary nucleon-nucleon interactions. Orig. art. has: 3 figures.

SUB CODE: NP/ SUBM DATE: 00/- ORIG REF: 002/ OTH REF: 006

JC
Card 2/3

L 04/04/67 EWT(1)/EWT(m)/EWP(j)/T/EWP(k) IJP(a) WG/RTW/AT/RM
ACC NKT AP603/4418 SOURCE CODE: UR/0386/66/004/008/0277/0282

AUTHOR: Arutyunyan, F. R.; Ispiryan, K. A.; Oganesyan, A. G.; Frangyan, A. A.

ORG: Joint Radiation Laboratory, AN ArmSSR and YeGU (Ob'yedinennaya radiatsionnaya laboratoriya AN ArmSSR i YeGU); Physics Institute, Yerevan (Fizicheskiy institut)

TITLE: Resonance radiation of electrons of energy up to 600 Mev in a layered medium

SOURCE: Zhurnal eksperimental'noy i teoricheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniya, v. 6, no. 8, 1966, 277-282

TOPIC TAGS: resonance scattering, bremsstrahlung, electron radiation, radiation spectrum, layered medium

ABSTRACT: The authors present experimental results on the characteristics of the radiation produced in different layered media by passage of high-energy electrons. The experiment was performed with the electron synchrotron of FIAN SSSR (maximum energy 680 Mev). Different layered media were used. Each consisted of n sheets of a paper of definite thickness δ_1 , placed in air at an equal distance a_1 from one another. The electrons were registered with a scintillation telescope consisting of two plastic scintillators located on the two sides of the layered medium. The radiation spectrum up to 100 Mev was observed with a pulse-height analyzer. The measurements were made also for a solid medium, comprising the same layers compressed to $a = 0$. The quantity measured in this case was that part of the radiation in the layered medium, which was due to the electron bremsstrahlung in the layered medium itself and in the remaining

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L-04404-67

ACC NR: AP6034418

Z

matter on the path of the electron, and also due to secondary effects. The experimental data show that for relatively low γ -quantum energies the radiation intensity in a layered medium depends to a considerable degree on the energy of the electron and exceeds by many times the radiation intensity in the solid medium. With increasing γ -quantum energy the spectrum of the radiation in the layered medium gradually goes over into the spectrum of the solid medium, which does not depend on a , t_1 , or E when the amount of matter remains constant. The difference in the radiation intensities in the layered and in the solid medium was compared with the results of the theory of resonance radiation with allowance for the γ -quantum absorption on their entire path. The experimental data exceeded by many times the corresponding theoretical ones even without allowance for the γ -quantum absorption. The experimental values exceeded the theoretical ones also for all the investigated layered media with different a , t_1 , and n . The observed difference is attributed to the appreciable scattering of electrons in the layered medium itself. It is assumed that multiple scattering leads to the appearance of photons of relatively high energy, normally not appearing when scattering is not taken into account. It is concluded that the experimentally observed radiation of electrons in a layered medium, with an intensity that exceeds by many times in the x-ray region the intensity of the bremsstrahlung, and which depends strongly on the particle energy (like E^n , where $n \geq 2$), can be used to determine the particle energy. The authors thank Professor V. A. Petukhov and the staff of the High-energy Electron Laboratory of FIAN SSSR for the opportunity to perform the present experiment, and

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L - 04404-67

ACC NR: AP6034418

also Professor M. L. Ter-Mikayelyan for a discussion. Orig. art. has: 3 figures and
1 formula.

SUB CODE: 20/ SUBM DATE: 14Jul66/ ORIG REF: 007

Card 3/3

vmb

L 29711-66 EWT(1)/EWT(m)/EWP(e)/EWP(t)/ETI WH/VW/JD
ACC NR: AP6015587 (A) SOURCE CODE: UR/0146/66/009/002/0123/0125

AUTHOR: Ispiryan, R. A.; Yermakov, B. F.; Yaryshev, N. A.

ORG: Leningrad Institute of Precision Mechanics and Optics (Leningradskiy institut
tekhnicheskoy mekhaniki i optiki)

TITLE: An argon-arc heat source for high temperature research

SOURCE: IVUZ. Priborostroyeniye, v. 9, no. 2, 1966, 123-125

TOPIC TAGS: high temperature research, electric arc, argon, heat source

ABSTRACT: Data are given from experimental tests of an argon-arc source with a power of up to 20 kw designed for thermophysical research (see figure). An electric arc is struck between electrode 1 (the cathode) and nozzle 3 (the anode) which heats the argon injected into the nozzle cavity through aperture 5. This results in jet 4 which is the source of heat. Power is increased by using an additional copper or graphite nozzle 9 to which a positive potential is applied after ignition. The arc is struck by introducing graphite or tungsten rod 10 into the cavity of the first nozzle 3 until it makes contact with electrode 1. A graph is given showing the specific thermal flux of the output jet as a function of the electric power of the source. The heat flux 15 mm from the cutoff of the output nozzle is $6.4 \cdot 10^6$ w/m² for an argon flow rate of

UDC: 621.365.2

Card 1/2

AVETISYAN, A.A.; SIDEL'KOVSKAYA, F.P.; ISPIRYAN, R.M.

Addition of mercaptans to N-vinyl and N-allythiolactams. Izv.
AN SSSR Ser. khim. no. 7:1303-1308 Jl '64,

(MIRA 17:8)
1. Institut organicheskoy khimii imeni Zelinskogo AN SSSR.

ISPOLATOV, D.F.

Problems in classes in school study rooms. Gig. i san. 24 no.9:82
S '59.

(MIRA 13:1)

1. Iz respublikanskoy sanitarno-epidemiologicheskoy stantsii Karelii
skoy ASSR.

(SCHOOL HYGIENE)

ISPOLATOV, Yu., inzhener-polkownik; GOLODOVSKIY, Ya., inzhener-podpolkovnik

New modifications of automobiles from the Likhachev Factory.
Tyl i snab. Sov. Voo. Niz 21 no.4:86-88 Ap '61.

(MIRA 14:7)
(Automobile Design and construction)

GOLODOVSKIY, Yakov Yeoshmyevich; ISPOLATOV, Yuriy Veniaminovich;
KALAMKAROV, Rafael' Grigor'yevich; PODKOLZIN, Aleksey Vasil'yevich;
RUMYANTSEV, Vladimir Alekseyevich; PERLINA, V.S., red.;
OKUNEV, Yu.K., podpolkovnik, red.; MEDNIKOVA, A.N., tekhn.red.

[The ZIL-157 motortruck] Avtomobil' ZIL-157. Moskva, Voen.
izd-vo M-va obor.SSSR, 1960. 327 p. (MIRA 13:11)

1. Russia (1923- U.S.S.R.) Avtotraktornoye upravleniye.
(Motortrucks)

TITOVA, A.I.; ISPOLATOVA, A.V.

Effectiveness of whooping-cough-diphtheria vaccine in prevention of whooping cough. Vop. okhr. mat. i det. 6 no.6:63-65
Je '61. (MIRA 15:7)

1. Iz kafedry detakikh bolezney (zav. - prof. A.I. Titova)
Yaroslavskogo meditsinskogo instituta.
(WHOOPING COUGH—PREVENTIVE INNOCULATION)
(DIPHTHERIA) (VACCINES)

ISPOLATOVA, I.F., inzh.; KOLOMEYETS, A.V., kand. tekhn.nauk,
retszenze'; PAVLOV, V.I., red.; KHITROVA, N.A., tekhn.
red.

[Using integrated brigades in overhauling apartment houses;
practice of the Petrozavodsk Division of apartment houses
and structures of the Oktiabr' Railroad] Kompleksnye brigady
na kapital'nom remonte zhilykh zdanii; opyt Petrozavodskoy
distantsi i sooruzhenii Oktiabr'skoi dorogi. Moskva,
Transzheldorizdat, 1963. 50 p. (MIRA 16:12)
(Petrozavodsk--Railroads--Buildings and structures)

ISPOLATOVSKAYA, M. V.

ISPOLATOVSKAYA, M. V. -- "Respiratory Gas Exchange of Bacterial Cultures of the Coli Group in the Presence of Deep Cultivation." Acad Ned Sci USSR, Inst of Epidemiology and Microbiology imeni Honorary Academician N. F. Gamaleya, Moscow, 1955. (Dissertations for the Degree of Candidate in Biological Sciences)

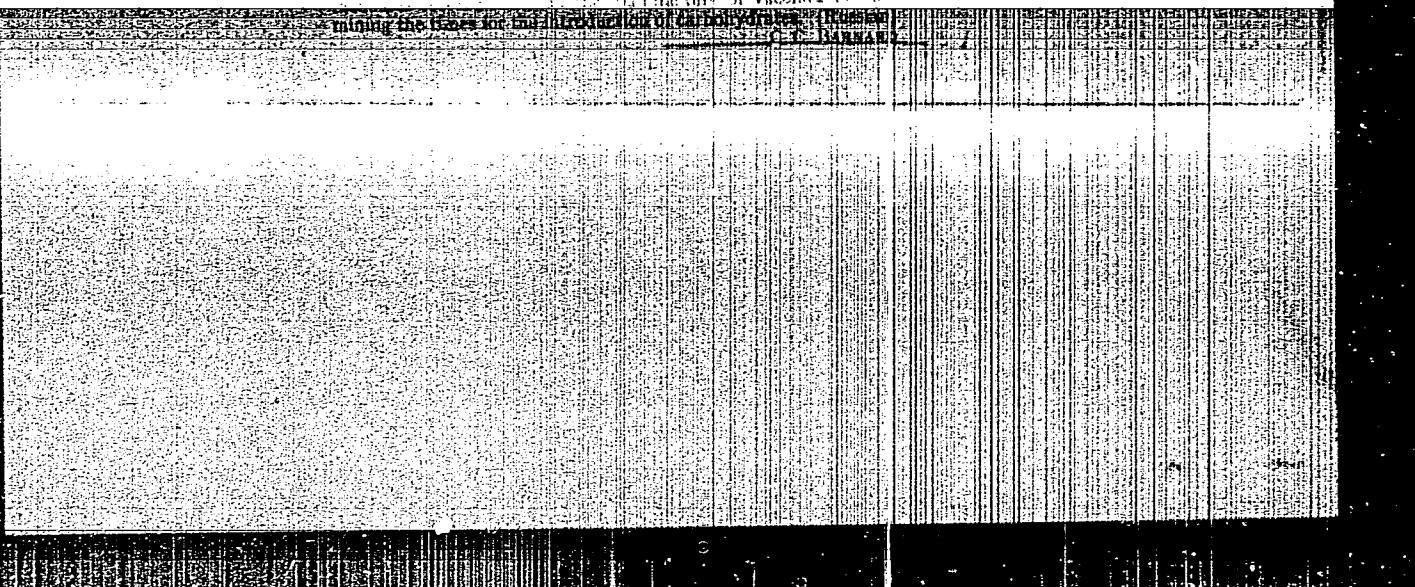
SO: Knizhnaya Letopis': No. 39, 24 Sept 55

ISPOLATOVSKAYA M.V.

111. Some gaseous products of metabolism of bacteria of Plancton
Sozni, and Shiga dysentery grown in subaerobic conditions. M.V.
Ispolatovskaya Vop. med. Relya., 1965, L. 411-418; Referat. M.
biol. Khim., 1966, Abstr. № 11478. ...The gaseous exchange rate
studied by the method of analyzing the air issuing from a respirometer
which contained strains were being grown. The respiratory
activity was estimated from the consumption of oxygen and the
liberation of carbon dioxide. A diminution of respiratory activity
in the presence of nitrate was taken as an indication of a bactericidal
action of nitrate on the culture. The utilization of this phenom-
enon made it possible to determine the factor of resistance to nitrate
of various strains of bacteria.

M.V.

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USSR/Microbiology. General Microbiology. Physiology and
Biochemistry

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 62244

Author : Ispolatovskaya M.V., Kovalova N.I.

Inst :
Title : Gas Exchange as the Indicator of Viability of
Bacterial Cultures of the Intestinal Group.

Orig Pub : Zh. mikrobiol., epidemiol. i immunobiologii,
1957, No 5, 76-80

Abstract : Gas exchange studies (formation of CO₂ and ab-
sorption of O₂) in deep-soated typhoid fever
bacteria, paratyphoid bacteria B, and dysentery
bacteria Sonne and Flexner on a synthetic medium
under aeration conditions showed that the res-
piratory acrivity of the bacterial culture ap-
pears to be the indicator of its capacity to re-
produce. The respiratory activity of the culture,

Card : 1/2

4

I S P O L A T O V S K A Y A M . V.
EXCERPTA MEDICA Sec 4 Vol 12/4 Med. Micro. Apr 59

RECEIVED - Sarajevo

1107. PURIFICATION AND CHEMICAL STUDY OF THE HISTOLYTICUM
TOXOID (Russian text) - *Ispolatovskaya M. V.* Dept. of Biochem.,
Inst. of Epidemiol. and Microbiol., Acad. of Med. Scis of the USSR,
Moscow - BIOKHIMIYA 1957, 22/6 (1000-1003) Tables 2 Illus. 2
The toxoid concentrates of Cl. histolyticum obtained by precipitating native toxoid
in the isoelectric point by 1 N-HCl + 15% NaCl contain a large amount of ballast
substances. Further purification of these preparations was carried out by sedi-
mentation with acetone at pH 6.5-6.8, at -4°-12° and ionic strength 0.1-0.2.
Electrophoretic analysis showed that the protein fraction is a single component
system. Chromatographic analysis of the purified toxoid revealed the presence of
19 amino-acids and no carbohydrates.

ISPOLATOVSKAYA, M.V.

ISPOLATOVSKAYA, M.V.; ATABEGOVA, M.A.

Effect of increased carbon dioxide concentrations on the growth and respiratory activity of *Shigella flexneri*. Zhur.mikrobiol.spid. 1
immun. 28 no.6:98-101 Je '57. (MIRA 10:10)

1. Iz Instituta epidemiologii mikrobiologii imeni Gamalei AMN SSSR.
(SHIGELLA, DYSENTERIAE, culture,
eff. of carbon dioxide on growth & resp. (Rus))
(CARBON DIXIDE, effects,
on Shigella dysenteriae growth & resp. (Rus))

ISPOLATOVSKAYA, M.V.; ATABEGOVA, M.A.

Measuring respiratory activity in aerobic bacterial cultures based
on the analysis of air from culture medium. Zhur.mikrobiol.epid.
i immun. no.1:85-87 Ja '58. (MIRA 11:4)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(BACTERIA,
analysis of air from culture media in determ. of resp.
changes during aeration (Bus))

BLAGOVESHCHENSKIY, V.A., ISPOLATOVSKAYA, M.V.

Concentration and purification of *Clostridium histolyticum* anatoxin.
Zhur.mikrobiol.epid. i immun. 29 no.5:91-94 My '58 (MIRA 11:6)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN
SSSR.

(CLOSTRIDIUM,
histolyticum, concentration & purification of anatoxin
(Rus))

ISPOLATOVSKAYA, M.V., POMYANKEVICH, A.N.

Studies on the antigen composition of diphtherial anatoxin during
its purification. Zhur.mikrobiol,epid. i immun. 29 no.6:26-31
Je '58 (MIRA 11:?)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN
SSSR.

(DIPHTHERIA, immunology
anatoxin, antigenic properties during purification
(Rus))

ISPOLATOVSKAYA, M.V.; BLAGOVESHCHENSKIY, V.A.; VLASOVA, Ye.V.; KUZ'MINA, A.P.

Electrophoretic and immunochemical investigations of Clostridium
oedematis anatoxin. Zhur.mikrobiol.epid. i imun. 30 no.1:54-48
Ja '58. (MIRA 12:3)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN
SSSR.

(CLOSTRIDIUM
oedematis anatoxin, electrophoretic &
immunochemical aspects (Rus))

ISPOLATOVSKAYA, M.V.

Studying Clostridium histolyticum anatoxins by zone electrophoresis
and counter diffusion on agar. Zhur.mikrobiol.epid. i imun. 30 no.1:
58-61 Ja '58. (MIRA 12:3)

1. Iz instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(CLOSTRIDIUM,
histolyticum anatoxin, zone electrophoresis &
counter diffusion on agar (Ius))

Is polatovskaya, M.V.

GURVICH, A.Ye., ISPOLATOVSAYA, M.V.

Quantitative studies on antibodies in immune horse serum against Clostridium oedematiens with the aid of paper precipitation or antigen fixed on paper [with summary in English]. Biul.eksp.biol. i med. 45 no.5:79-83 My '58
(MIRA 11:6)

1. Iz laboratorii fiziologicheskoy khimii (zav. prof. S.Ya. Kaplanskiy) Instituta biologicheskoy i meditsinskoy khimii (dir. - deystvitel'nyy chlen AMN SSSR V.N. Orekhovich) AMN SSSR i otdela biokhimii (zav. - kand.med.nauk. V.A. Blagoveschchenskiy) Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei (dir. - prof. S.N. Muromtsev) AMN SSSR, Moskva. Predstavlena deystvitel'nym chленом AMN SSSR V.N. Orekhovichem.

(CLOSTRIDIUM,
oedematiens, immune serum, determ. of antibodies (Eng))

ISPOLATOVSKAYA, M.V.

Method for an electrophoretic study of bacterial anatoxins.
Lab.delo 5 no.2:24-25 Mr.Ap '59. (MIRA 12:5)

1. Iz otdela biokhimii (zav. - kand.biol.nauk V.A.Blagoveshchenskiy) Instituta epidemiologii i mikrobiologii imeni Gamalei, Moskva.

(ELECTROPHORESIS) (TOKINS AND ANTITOKINS)

ISPOIATOVSKAYA, M.V.; LARINA, I.A.

Studying electrophoretic properties of phospholipase C of the
B. perfringens toxin during detoxication. *Biokhimiia* 24
no.4:738-744 J1-Ag '59. (MIRA 12:11)

1. Institut epidemiologii i mikrobiologii im. N.F.Gamaleya
Akademii meditsinskikh nauk SSSR, Moskva.
(CLOSTRIDIUM PERFRINGENS)
(TOXINS AND ANTITOXINS chem)
(ESTERASES chem.)

BLAGOVESHCHENSKIY, V.A.; MARMALEVSKAYA, L.Ya.; ISPOLATOVSKAYA, M.V.

Studies on the antigenic composition of tetanus anatoxin during the process of purification. Zhur.mikrobiol.epid.i immun. 30 no.10:78-82 O '59. (MIRA 13:2)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(TETANUS immunol.)
(VACCINES)

ISPOLATOVSKAYA, M.V.; BAKAYEVA, O.A.; OSTROVSKAYA, N.N.

Electrophoretic and immunochemical study of the protein components
of the blood serum in guinea pigs in the development of Brucella
infection. Biul. eksp. biol. & med. 49 no.3:46-50 Mr '60.
(MIRA 14:5)

1. Iz otdela biokhimii i brutselleznoy laboratorii Instituta
epidemiologii i mikrobiologii imeni N.F. Gamalei (dir. - prof.
S.N. Mirontsev) AMN SSSR, Moskva. Predstavlena deystvitel'nym
chlenom AMN SSSR L.A. Zil'berom.

(BRUCELLOSIS) (BLOOD PROTEINS)

ISPOLATOVSKAYA, M.V.

Electrophoretic examination in microbiology and immunology; survey
of the literature. Zhur. mikrobiol. epid. i immun. 31 no. 4:116-120
Ap '60. (MIRA 13:10)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei
AMN SSSR.

(ELECTROPHORESIS) -

ISPOLATOVSKAYA, M.V.; MARMALEVSKAYA, L.Ya.

Study of the antigenic composition of Cl. perfrigens toxin and
anatoxins. Zhur.mikrobiol.epid.i immun. 31 no.8:87-93 Ag '60.
(MIRA 14:6)

1. Iz otdela biokhimii Instituta epidemiologii i mikrobiologii
imeni Gamalei AMN SSSR.
(CLOSTRIDIUM PERFRINGENS) (TOXINS AND ANTITOXINS)

ISPOLATOVSKAYA, M. V., NEZLIN, R. S., GURVICH, A. E., MYASCHIEDOVA, K. N. (USSR)

"The Isolation of Purified Antibodies and Study of
their Properties."

Report presented at the 5th International Biochemistry Congress,
Moscow, 10-16 August 1961

ISPOLATOVSKAYA, M. V., LEVDIKOVA, G. A., (USSR)

"The Purification and Immunochemical Properties of the Lecithinase Toxin of Clostridium perfringens."

Report presented at the 5th Int'l. Biochemistry Congress,
Moscow, 10-16 Aug 1961.

GURVICH, A.Ye.; ISPOLATOVSKAYA, M.V.; MYASOYEDOVA, K.N.

Determination and isolation of antidiphtherial antibodies with the aid of antigens fixed on cellulose. Vop. med. khim. 7 no. 1:55-61 '61. (MIRA 14:4)

1. Laboratoriya patologii obmena belkov i immunokhimii Instituta biologicheskoy i meditsinskoy khimii AMN SSSR i. otdel biokhimii Instituta epidemiologii i mikrobiologii imeni N.F. Gamalsi, Moskva.

(DIPHTHERIA) (ANTIGENS AND ANTIBODIES)

ISPOLATOVSKAYA, M.V.; LEVDIKOVA, G.A.; LARINA, I.A.

Separating the lecithinase and collagenase activities of the
Clostridium perfringens toxin by electrophoresis on starch.
Biokhimia 26 no. 1:77-81 Ja-F '61. (MIRA 14:2)

1. Biochemical Department, Institute of Epidemiology and Microbiology
and Institute of Biological and Medical Chemistry, Academy of
Medical Sciences of the U.S.S.R., Moscow.
(CLOSTRIDIUM PERFRINGENS) (TOXINS AND ANTITOXINS)
(LECITHINASE) (COLLAGENASE)

ISPOLATOVSKAYA, M.V.; VLASOVA, Ye.V.

Change in electrophoretic properties of *Clostridium cedematiens* toxin
under the influence of formalin. Biul. eksp. biol. i med. 51 no.3:
67-71 Mr '61. (MIRA 14:5)

1. Iz otdela biokhimii Instituta epidemiologii i mikrobiologii imeni
N.F.Gamalei (dir. S.N.Muromtsev [deceased]) AMN SSSR, Moskva. Pred-
stavlena deystvitel'nym chlenom AMN SSSR V.N.Orekhovichem.
(CLOSTRIDIUM NOVYI) (TOXINS AND ANTITOXINS)
(FORMALDEHYDE)

ISPOLATOVSKAYA, M.V.; LEVDIKOVA, G.A.; LARINA, I.A.

Separation of lecithinase, collagenase and hyaluronidase activities
of *B. perfringens* toxin using ion exchange cellulose. Biokhimia 27
no.1:82-87 Ja-F '62. (MIRA 15:5)

1. Department of Biochemistry, Institute of Epidemiology and Microbiology
and Institute of Medical and Biological Chemistry, Academy of Medical
Sciences of the U.S.S.R., Moscow.

(LECITHINASE) (CELLULOSE) (COLLAGENASE)
(HYALURONIDASE) (CLOSTRIDIUM PERFRINGENS)

ISPOLATOVSKAYA, M.V.; LEVDIKOVA, G.A.

Further purification and the immunochemical properties of lecithinase,
the lethal factor of *B. perfringens* toxin. *Biokhimia* 27 no.4:631-
635 Jl-Ag '62. (MIRA 15:11)

1. Department of Biochemistry, Institute of Epidemiology and
Microbiology, and Institute of Biological and Medical Chemistry
Academy of Medical Sciences of the U.S.S.R., Moscow.
(LECITHINASE) (TOXINS AND ANTITOXINS) (CLOSTRIDIUM)